Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A transponder device, comprising:

a radio frequency identification transponder having at least an oscillator circuit and a microcontroller and configured to operate in at least one of a plurality of modes of operation and to change modes of operation in accordance with the strength of a received radio frequency signal, the modes of operation comprising at least two of a first mode in which the oscillator circuit operates and the microcontroller does not operate in response to a first strength of the received radio signal, a second mode in which the oscillator circuit and the microcontroller both operate in response to a second strength of the received radio signal, and a third mode in which neither the oscillator circuit nor the microcontroller operate in response to a third strength of the received radio frequency signal.

2. (Original) The transponder device of claim 1, wherein each mode of operation is activated and deactivated independent of the other modes of operation in response to the strength of the radio frequency signal.

3. (Currently Amended) The transponder device of claim 1, wherein the transponder is configured to operate in a passive ~~mode~~ state when within a first distance ~~form~~ from the transceiver, and in an active ~~mode~~ state when within a second distance from the transceiver that is closer to the transceiver than the first distance.

4. (Original) The transponder device of claim 1, wherein the transponder is configured to deactivate all modes that are not operational.

5. (Original) The transponder device of claim 1, wherein the transponder is configured to activate only one mode of operation at a time.

6. (Currently Amended) A transponder device, comprising:

a radio frequency identification tag configured to operate in a passive ~~mode~~ state for backscatter operations and to operate in an active ~~mode~~ state for transmission of a radio frequency signal, the passive mode and the active mode selected in response to a received radio frequency interrogation signal, the tag further comprising an oscillator circuit, a ROM-based circuit, and a microcontroller circuit that are each configured to operate in response to the strength of the received signal only.

7. (Currently Amended) The transponder device of claim 6, wherein ~~the mode is selected~~ a tag is configured to operate in a first mode in which the oscillator circuit operates in response to ~~the~~ a first strength of the ~~interrogation~~ received signal, in a second mode in which the ROM-based circuit operates in response to a second strength of the received signal, and in a third mode in which the microcontroller circuit operates in response to a third strength of the received signal.

8. (Currently Amended) A transponder device for operation in conjunction with a radio frequency signal source, comprising:

a radio frequency identification tag configured to operate in a first mode when at a first distance from ~~a~~ the radio frequency signal source, to operate in a second mode when at a second distance that is closer to the radio frequency signal source than the first distance, and in a third mode when at a third distance that is closer to the radio frequency signal source than the second distance, the first, second, and third modes selected in response to receipt of a radio frequency signal transmitted from the radio frequency signal source, a tag is configured to operate in a first mode in which the oscillator circuit operates in response to a first strength of the received signal, in a second mode in which the ROM-based circuit operates in response to a

second strength of the received signal, and in a third mode in which the microcontroller circuit operates in response to a third strength of the received signal.

9. (Original) The transponder device of claim 8, wherein the mode is selected in response to the strength of the transmitted radio frequency signal.

10. (Original) The transponder device of claim 8, wherein the transponder is configured to deactivate all modes that are not operational.

11. (Currently Amended) A radio frequency transponder architecture, comprising:

a micro-power oscillator configured to obtain sufficient power from a received radio frequency signal to oscillate and be detectable at a first distance, a ROM-based circuit that obtains sufficient power from the received radio frequency signal at a second distance that is shorter than ~~the~~ a first distance to the source of the radio frequency signal to modulate an identification code preprogrammed in a memory of the ROM-based circuit, and a CMOS microcontroller configured to receive sufficient power from the received radio frequency signal at a third distance that is shorter than the second distance to the source of the radio frequency signal to perform at least one mode of operation from among the operating modes of a first mode of read operations, a second mode of write operations, a third mode of monitoring of external inputs, and a fourth mode of generating control signals for controlling external devices.

12. (Original) The architecture of claim 11, wherein each mode of operation is activated and deactivated independent of the other modes of operation in response to the strength of the radio frequency signal.

13. (Original) The architecture of claim 11, wherein the transponder is configured to deactivate all modes that are not operational.

14. (Original) The architecture of claim 11, wherein the transponder is configured to activate only one mode of operation at a time.

15. (Currently Amended) A communication system, comprising:

a transceiver configured to transmit a radio frequency signal and to receive a response signal; and

a transponder configured to operate in a plurality of modes and to activate modes of operation in response to only the strength of the radio frequency signal, the transponder comprising a radio frequency identification tag configured to operate in a first mode when at a first distance from the radio frequency signal source, to operate in a second mode when at a second distance that is closer to the radio frequency signal source than the first distance, and in a third mode when at a third distance that is closer to the radio frequency signal source than the second distance, the first, second, and third modes selected in response to receipt of a radio frequency signal transmitted from the radio frequency signal source, a tag is configured to operate in a first mode in which the oscillator circuit operates in response to a first strength of the received signal, in a second mode in which the ROM-based circuit operates in response to a second strength of the received signal, and in a third mode in which the microcontroller circuit operates in response to a third strength of the received signal.

16. (Original) The system of claim 15, wherein the transceiver is configured to vary the strength of the transmitted radio frequency signal.

17. (Original) The system of claim 15, wherein each mode of operation is activated and deactivated independent of the other modes of operation in response to the strength of the radio frequency signal.

18. (Original) The system of claim 15, wherein the transponder is configured to operate in a passive mode when within a first distance from the transceiver, and in an active

mode when within a second distance from the transceiver that is closer to the transceiver than the first distance.

19. (Original) The system of claim 15, wherein the transponder is configured to deactivate all modes that are not operational.

20. (Original) The system of claim 15, wherein the transponder is configured to activate only one mode of operation at a time.

21. (Original) The system of claim 15, wherein the transponder comprises a microcontroller having at least one input and at least one output for communication with external devices.